Webinar Transcript:

"Census Has Business Data? An Update on the Economic Census for Six Services Sectors"

May 21, 2020

Coordinator:

Welcome, and thanks for standing by. At this time, all participants are on a listen-only mode. During today's Q&A session, if you'd like to ask a question, please press star, then 1.

Today's call is also being recorded. If you have any objections you can disconnect at this time. I would now like to turn today's meeting over to Mr. Adam Grundy. Thank you, you may begin.

Adam Grundy:

Thanks, Operator. My name is Adam Grundy as the operator mentioned, and I'm in the Data User and Trade Outreach branch in the Economic Directorate which is an outreach branch within the Economic Directorate.

In today's webinar, we're going to be covering several services sectors. For example, (NAICS 51) or Information; NAICS 54 – Professional, Scientific, and Technical Services; NAICS 56 - Administrative and Support and Waste Management and Remediation Services; Educational Services or NAICS 61; Arts, Entertainment, and Recreation or NAICS 71; and Other Services or NAICS 81.

The greyed-out rows are the ones that we have already been conducted -- or, the webinars that we have already conducted. As you can see, as mostly on Tuesdays we cover most of the states that are covered in this subject base for the webinars. On Thursdays, we typically cover sector-based ones like today's discussion for May 21 is on services sector. As you can see, there's a couple more that we have going through the rest of June, July and one in August for the different topics that you see over there on the white rows.

Just a reminder that the census.com/data/academy, or census academy for short, is where you can see all the archived webinars that have already been conducted for this series. Before I get too far into what we're going to be discussing today, it's important to discuss both what the Census Bureau is about.

We're the federal government's largest statistical agency. We conduct more than 130 censuses and surveys each year which include the 2020 census or the decennial census or as you know is the once a decade population and housing count of the United States. Additionally, American Community Survey is an ongoing annual survey of the nation's population. The census of governments identifies the scope and nature of the nation's state and local government sector.

And then today's focus, the Economic Census. This is the official five-year measure of American business. On the right hand side, you see an example of the splash page for census.gov. On this slide you can see that we break apart the different types of surveys into months and quarterly at the top of the pyramids which cover the sample surveys that provide the most timely data available. But they're not the most detailed.

Annual surveys in the middle have larger sample sizes and they provide the most up-to-date trend data available. And then as I mentioned for today's focus, the economic census at the bottom of the pyramid is done every five years in years ending in 2 and 7 and provides the most comprehensive data available.

The economic census covers almost every two- through six-digit code covered by the Census Bureau. It excludes agriculture, or NAICS 11, and other

selected types of businesses. By going to this hyperlink that you see embedded after this, you can take a look at some of the exclusions from the survey. It provides data at the national, states, metro area, county and even place levels for the levels of the geography for the economic census.

Other data dimensions include data by business size, franchise status, etc. There's over 200 data variables available, including variables like the number of establishments, payroll, and also inventories, assets, and expenses. We also take a look at product lines data that gives you specific data about the types of products that are sold throughout the US.

The data for the economic census is going to be released and has been released on data.census.gov our new Data Dissemination platform. In August of this year Census Business Builder 3.1 will be hosting economic census data from the 2017 Economic Census. And there's also other data tools such as QuickFacts which will later have economic census data.

Another important notice you'll note at the bottom. We also have selected data based on race, ethnicity, gender and veteran status and the previously used service business centers and the annual survey or entrepreneurs. These two surveys no longer exist because they've been replaced by a new survey that just released data on May 19th called The Annual Business Survey, or ABS.

On the right-hand side of this graphic you can see data examples of our promotion schedule for the economic census as well as the promotion for understanding what the economic census has in it.

On this slide I'd take a look at six key services sectors. On the red font - on the red bars - are the examples are ones that that we're going to be covering in today's presentation. The blue bars are other sectors that are not going to be covered in today's presentation. For example, there's nearly 2.3 million establishments or 29.9%, 32.6 million employees or 25.7% for these sectors, and 5.4 trillion for total revenue.

It's important to note that NAICS 61 has some major exclusions, for example colleges and universities. And again NAICS 61 is for educational services. Also, it's important to note the non-employer statistics is that an important factor in many of these sectors. Non-employer statistics covers people with no paid employees.

On this slide, this details the Economic Census planned data product releases. As you can see, we started releasing data in September 2019 and our data releases will continue through December 2021. Our geographic area series is most likely going to be wrapped up in August of 2020. After that, we're going to be releasing data on revenue size of establishments, employment size of establishments, and so forth. We'll also produce our miscellaneous subject tables towards the end of the year.

And you can stay up-to-date about things that are going on in the economic census by taking a look at our release schedules link which is at the bottom in this red box at the bottom. Another important way to stay on top of the different geographic series releases is by taking a look at this infographic which can be found at this hyperlink that's up top in this red box. This infographic allows you to select either a sector or a state that has deep links embedded in it that take you directly to our Data Dissemination platform. data.census.gov.

As you populate the different things on this graphic, for example, selecting Professional Scientific and Technical Services or NAICS 54, the percentage

marker on the bottom right will automatically repopulate to show you what percentage of that sector's been released in the United States. Additionally, there's states that show up on the infographic will automatically repopulate based on your selections. This way you're not wasting any time by figuring out what has been released so far and what has not.

There are some key changes to the economic census this year. There's been geographic area changes such as counties, places and metros which we'll dive into in a little bit. North American Industry Classification System changes, for example, new NAICS codes and change codes. Many to one recodes, one-to-one recodes, and then even many to many recodes which I'll explain on the next few slides. And also the product lines tables have been replaced with North American Product Classification System's tables. This is a new change for the 2017 Economic Census that you should be aware of.

There are some other changes. There are some drops and changes in miscellaneous subject tables and new disclosure rules. For example, counties that we may have been able to publish for in the past based on disclosure rules for different sectors we may not be published for this economic census. We'll go into some of more of those examples in just a few minutes.

Another change is the new data.census.gov Dissemination platform which I've mentioned several times during this presentation. To find a summary of the key changes you can view our recorded webinar which was done by a colleague of mine who's going to be able to answer questions at the end of presentation, Andy Hait, who recently conducted a webinar on the different key changes for the economic census. It was first conducted in roughly 2019.

On this graphic we're going to take a look at NAICS, our North American Industry Classification System. This is a standard used by US federal and

statistical agencies to classify businesses. It was originally developed by OMB, Statistics Canada and Mexico's Stat Agency. It helps ensure statistical comparability across North American countries. It was adopted in '97 and as you may or may not know it's updated every five years. There's a hyperlink in this parentheses that shows you the 2017 NAICS Manual.

And as I previously alluded to, in the next few slides we're going to be taking a look at some of the types of changes for the NAICS. For example, one-to-one recodes, many-to-one, and many-to-many. These are color coded in the same way that you'll see on the next few slides. For example, let's take a look at the mining sector in NAICS 21. We have crude petroleum and natural gas extraction. That has now changed into clear petroleum extraction on NAICS 21120.

Another example is lead ore and zinc ore mining or copper ore and nickel ore mining have now merged into one NAICS code of 211- excuse me 212230 - Proper Nickel, Lead and Zinc Mining. In the manufacturing sector, you see Pump and Pumping Equipment Manufacturing/Measuring and dispensing Pump Manufacturing has merged into one NAICS category of 233914 - Measuring, Dispensing and Other Equipment Manufacturing.

Please note at the top there were no NAICS changes for NAICS 66 - Administrative and Support Waste and Management and Remediation Services; Educational Services - NAICS 6; NAICS 71 Arts, Entertainment, and Recreation; and NAICS 81 - Other Services. This makes it easier for the comparisons you may do on your data analysis between 2017 and 2012 data. And then taking a look at Retail Trade on NAICS sector 45, we see all other general merchandise stores as the same NAICS description but a new NAICS code of 452319. You can visit the NAICS website at the bottom here to take a

look at some of the more information that you can grab that describes some of these NAICS changes.

On this slide we take a look at some of the other sectors that we're going to be discussing today so, for example, Information. Record Production and Integrated record Production/Distribution has merged into one new NAICS code of 512250 - Record Production and Distribution. Also, for Professional, Scientific and Technical Services the Research and Development and Biotechnology has split into two different NAICS codes for Research and Development in Nanotechnology and Research and Development in Biotechnology except Nano-Biotechnology. By understanding what has changed for each of these data set years from 2012 to 2017 you'll be able to more easily locate the data that you are looking for.

So now that we've discussed some of the different NAICS changes, where can you actually find this great data? Well for starters data.census.gov. This is our main dissemination platform. In August, we're going to be releasing data in Census Business Builder 3.1 which overlays economic data and demographic data onto a map. Additionally, QuickFacts should have economic census data for 2017 later on this year.

This slide takes a look at the 2017 Economic Census Fun Facts. This is an ongoing series of fun facts that uses the official quarter design for the US Mint from a couple years ago. Each of these fun facts is focusing on one sector at a time for a specific state. You can take a look at the whole list of all these different fun facts and the core designs by baking a look at this hyperlink at the top up here, for the economiccensus/library/visualizations. Additionally, there's a story that builds around these fun facts from America Counts article which is a series that we have that you may want to check out at the bottom.

All right so let's dive right into the data. These are some selected findings for the revenue for NAICS subsector and for example in the United States from 2012 to 2017 in billions in dollars. So, as you can from the Professional, Scientific and Technical Service sector, or NAICS 54, we saw the greatest increase in revenue over this five-year period. This followed by Administrative and Support Services that had the second greatest change from 2012 to 2017.

After this, we'll take a look at the Revenue by Tax Status for Selected Services Industry Groups. As you can see, Legal Services had a large decrease in 2012 – excuse me, from revenue-to-revenue tax exempt. So, revenue taxable is in the orange whereas revenue tax exempt is in the yellow. Scientific Research and Development Services also has a lot more revenue - taxable - in billions of dollars versus revenue tax exempt.

On this slide, this is another way to look at the same data but by the percentage of the actual total. As you can in Museums, Historical Sites and Similar Institutions makes up 90.7% of the total for that particular sector.

On this slide you can see that employment somewhat near is the number of establishments. So, it's interesting to note that Administrative and Support Services sector is higher than Professional and Scientific and Technical Services which had such a huge increase in employment. You can explore this further by drilling down to more detailed NAICS codes. Again, this is just a snapshot that we can take a look at by diving into the different economic census data that we have for both sets 2012 and 2017.

On this one you see that the average annual payroll per employee for NAICS subsector in the United States in 2017. The leader on this one was Other Information Services, which includes News Syndicates, Libraries, Archives

and Internet Publisher/Broadcasters and ISPs. You could explore this further by drilling down into the data.

So let's explore the data for Professional, Scientific and Technical Services sector some more on NAICS 54. Here's the revenue data at the four-digit level that breaks apart a different four-digit NAICS for the sector. So, for example, Computer Systems and Other Related Services has a revenue of \$445.2 billion. Comparing that to Specialized Design Services we see that's \$25.2 billion and Legal Services is \$297.9 billion. This is just a sample of the different data that you can find by drilling down into the economic census data.

And then the Average Annual Payroll for Employee for the same sector in 2017 - Please note that the average annual payroll for employees for all industries - or NAICS 00 - is \$52,300. This is just used as a quick comparison as we take a look at NAICS 54 as it compares to all sectors of the economy. So all but one of these industry groups are higher than the national average for all these industries.

So, let's explore Computer Systems Design and Related Services some more. In this one you see that California is the largest state with the amount of revenue for this particular selected sector and, however, Virginia and New York are not too far behind. It will be interesting to see where New York falls when we publish Florida and Texas data.

So, let's explore Virginia a little bit further. As we take a look at Professional, Scientific and Technical Services established in Virginia by this industry group, we see that Computer Systems Design and Related Services is the leader in this NAICS category. So, this industry group is not only being compared to the other states but also the biggest within this sector in Virginia.

These slides have looked at data at national and state level. Then we can drill down more into the metro, county and even place levels to explore the industries. We would strongly encourage you all to do this.

So, what's coming next? We're going to do a recent data on our North American Product Classification Systems starting in November 2020. For information in understanding what NAPCS - or NAPCS - is about you can go to this hyperlink that's embedded in the presentation. Also we're going to be using establishment and franchised data which includes revenue size, establishment size, single and multi-unit, and concentration of large firms, and a Legal Form of Organization or LFO.

As for the Miscellaneous Subjects data or the tables you can see over here on the bottom right, we'll be releasing November 2020 through September 2021. In summary, the economic census provides a wealth of business data but it is just a small sip of the different things you can dive into and the data you can look at from the economic census.

The data is released on a flow basis. All states and sectors will be complete in August of 2020 as I mentioned earlier. And more data is coming. You can learn more about the different releases that are coming out by taking a look at this hyperlink that's embedded in the presentation.

And I spent some time in this presentation taking a look at the NAICS changes that occur every five years. This is important to note because you want to make sure your data are comparable. The data are not being released on data.census.gov rather than American FactFinder which has been decommissioned. And again, more data are coming.

So, at this time, I'm going to thank everyone for attending today's webinar and I'm going to ask the operator to open up the phones for questions.

Additionally, some people have been submitting some questions over the chat feature which we will be addressing at this time with my colleague, Andy Hait. Thank you.

Coordinator:

That is a quick reminder for those that would like to ask a question via phone line, please press star, then 1, remember to unmute your phone and record your name clearly when prompted. If you'd like to withdraw your question, you may press star 2. Once again, if you'd like to ask a question, please press star, then 1. One moment to see if we have any questions.

Andy Hait:

So, while we're waiting for you all to queue up for your online or your over the phone questions, let me bring up a couple of the question that you all have entered in the chat.

So, the first question that I saw on the chat was asking about the concentration ratios report which includes the Hirschman-Herfindahl Index. I thought I mentioned one of the data products that we release after we complete releasing the geographic area data is what we call the Establishment and Firm Size reports. And it's in those reports that start coming out in November where we have the concentration ratio data.

Those data are available from nearly every sector of the US economy, so not only manufacturing and retail but a lot of other sectors as well. There's only two or three sectors that we don't public concentration ratio data for. And I would encourage you all to check that out. Those data provide really amazing insight into how concentrated businesses in the United States are, meaning what share of the industry shipments or sales are accounted for by the top companies in that industry.

Another question that we got was a question regarding our new disclosure rules that Adam referred to. Starting with 1990- excuse me, starting with the 2017 Economic Census as well as our 2017 County Business Patterns, 2017 Non-Employer Statistics and a variety of other data products have started being released for 2017 we had implemented new disclosure rules that are designed to protect the privacy of businesses who respond to our surveys.

As you all know, the Census Bureau is committed to protecting the privacy of businesses and people who respond to our programs, because we're required to by law, Title 13 of the US Code dictates that the Census Bureau cannot publish detailed data that would identify individual respondents whether they are people are businesses. Starting with the 2017 Economic Census, we are implementing some new rules that have been given to us by the Internal Revenue Service through what we can the IRS PUB 1075 Rule.

And, yes, there is an impact of these new disclosure rules on our data. It's partially why we have now decided to not publish place level data for the manufacturing sector as Adam mentioned, and it's also going to be why you're going to see some reduction in the detailed data published in programs like the Annual Business Survey, the new ABS, which was just released two days ago. You will see a similar impact in county business patterns, etc.

So, essentially in cases where we used to be able to publish data on a number of businesses even though we had to suppress the employment and payroll and other data because of privacy, now we're having to suppress all of that data. So, it's sort of the bummer portion of our presentation today, but again this is all a function of our requirement to protect the privacy of businesses who respond to our surveys.

Andy Hait:

The last question that I'll bring up before we go over to the phone is someone asked a question about sort of what are the rules that govern why NAICS codes change. And essentially there are three types of things that occur. The first of the change that occurs is emerging industries, industries that previously had very few businesses in that industry. They were sort of birth industries, just getting started, but now that industry has now matured to the point that it now sort of, if you will, deserves having its own NAICS code.

So in the 2012 Economic Census we published brand new data on solar, geothermal, thermal, wind and biomass electric power generation. Those industries have been around for over a decade, but it wasn't until fairly recently that those industries became more mature and now have their own NAICS codes. For the 2017 Economic Census and 2017 NAICS, the one big new NAICS code is for biotechnology for nanotechnology.

The second reason why NAICS codes are changed is due to industry decline or consolidation. So if you think about industries where that industry - that type of business, those activities are in decline we don't make "buggy whips" in the United States like we used to a hundred years ago so the "buggy whip" industry has declined and having a detailed NAICS code for that particular industry now is no longer feasible.

For example, in the 2017 NAICS change you notice that Adam mentioned that the industries - for appliance manufacturing, for refrigerator manufacturing, for cooking appliance manufacturing, for clothes washing appliances and for other appliances - have now been collapsed into one NAICS code and that is primarily due to the fact that there are so few US manufacturers of those kinds of products today that we aren't able to collect and publish detailed data for each separate industry so they've been combined into another category.

I do want to point out that even in cases where an industry has not declined but consolidation has occurred where the number of companies that are in a particular industry has reduced and declined, you'll notice those are cases also where we have to combine NAICS codes because it's no longer feasible for us to publish data for that particular industry. You can probably think of half a dozen or so industries in the US where there's only one or two or three companies that are in that industry in the United States.

And then the final reason I want to say for NAICS classification changes is due to the changing nature of the types of activities that those businesses are doing. So, for example, Adam showed you all that one of the changes that has happened in 2017 is discount department stores that sell a significant amount of perishable food previously used to be classified as a discount department store. But those businesses really are operating more like the way warehouse clubs and supercenters operate.

So, in the NAICS classification system for 2017 businesses that previously were classified as discount department store sand have an insignificant amount of those perishable good - food - sales, they stay in discount department stores. But businesses that have a significant amount of perishable food sales, those types of businesses actually have moved. They've changed the NAICS classification over to the warehouse clubs and supercenters industry.

So, these NAICS changes are all designed to make sure that we are collecting and publishing information that is representative of what's actually occurring in the US economy. And if you want to learn some more about what's happening for the 2022 NAICS classification changes, you can actually read about those in the federal register notice.

So, with that let me turn it back over to the operator and see if we have any calls.

Coordinator:

Yes, we do have one question in queue. Your line is open.

(Caller 1):

Yes, hi. So, I do a lot of work with raw data and one of the things I run into is the NAICS is fantastic - it's very specific - but a lot of the pre-2017 data sets are quite a bit more granular. And so, there's a little bit of a crosswalk that I have to put together to kind of meld some of the Lotus 7 data sets that are using the - it's not the SIC, it's the NFC codes with NAICS that I can get from something, say that the County Business Patterns, will we all see all of the data sets that are coming out that are economic, will they all be on the NAICS code system now?

Andy Hait:

So, at the Census Bureau the answer to that question is yes. And with very few exceptions we always try to publish our business data on the latest vintage of the classification system. So, for example, the 2012, 2013, 2014, 2015 and 2016 County Business Patterns Programs all published data using the 2012 NAICS codes. But starting with 2017 when we then had 2017 NAICS codes now for '17, '18, '19, '20 and '21 the County Business Patterns we publish on the NAICS basis - on the '17 NAICS basis.

The NAICS website does have a crosswalk - what they call comparability tables - that actually link the 17 NAICS basis to the 12 NAICS basis and even go back to 1997. So, if you really wanted to map the 97 NAICS codes all the way forward to the 2017 NAICS codes you could. And there's even a crosswalk back to SIC.

Here are some third party data providers that are still publishing data on an SIC basis and there are some crosswalk materials available, but you really

would need to chat with them because, to be quite frank, I don't understand how anybody is still publishing on an old SIC basis. Yes, I understand that having data comparable over time is really important and very useful to day users, but if it means losing detail that is now available, for example, under SIC there was a code for pagers. I don't know too many people today who actually have pagers, so that industry doesn't exist anymore under NAICS. And even industries that exist today like internal service provides, didn't exist under SIC. So, there's certainly some crosswalks that you'd have to do.

The last point I want to make is where the last data products we released in the economic census was something called the Bridge Report. And what the Bridge Report does is it shows those linkages between the 2012 NAICS basis and the 2017 NAICS basis, but not just by simply showing you Code A became Code B or these three codes were combined to form this fourth code. What the Bridge Report does is actually puts numbers behind those comparability tables. So, it gives you some information about the true impact or the significance of a NAICS change.

So, I want to give you a specific example from the last economic census. Previously under the old classification system companies that manufactured inflatable boats - these boats that we see at the dock that are used for larger vessels that are out in the harbor - those companies and those businesses were classified as Rubber or Plastic Product Manufacturers, based upon whether the boat was made out of plastic or rubber.

But in many ways those boats are just as much a boat as a solid fiberglass, or a solid aluminum boat might be. And if you've ever gone shopping for one of these new rigs, these rigid inflatable boats that have inflatable bladder around the outside but then have a hard fiberglass bottom, those boats can be almost as expensive as other boats. So, under the NAICS classification system those

rubber and plastic boats were moved over to the boat manufacturing industry. And you may say, "Wow, that's a pretty significant amount of movement." Well, if you look at the Bridge Report, the true impact on that industry was less than 5%. So, when you compare all those inflatables to the other businesses - the boat manufacturing industry - it was a fairly small total impact. So, users could say, you know, "I know it's not 100% comparable, but I'd say for my purposes that's close enough."

So, that type of information is available in the Bridge Report. And it's a great way to sort of understand the impact of these NAICS changes on the data. So, great question.

Caller 1:

Thank you.

Coordinator:

Thank you. I'm showing no further questions in the queue at this time.

Andy Hait:

Okay, let's see if we got another question that came in via the chat - okay, so someone asked a question about when the Illinois data will be available. When Adam and I built this presentation the Illinois data was not yet released, but it was just released last Thursday. So, our slides are a little tiny bit behind but data for Illinois did get started.

That website that Adam pointed to that shows that hexagon map of all the states of the nation and what sectors have been released is a great resource to turn to. Because it tells you not only what states have we released data for but it tells you what sectors we've released for those states and it provides links into our new data.census.gov platform to get access to the actual data for that sector and state. So, I would really encourage you all to check out that tool. I think that is it for right now. Operator, do we have any other questions pending?

Coordinator:

Yes, we do have another question for the phone lines. Your line is open.

(Caller 2):

Yes, so what I'm understanding on the ABS survey that came out, so what you're saying is what we're needing is some minority and women-owned business data, but it sounds like you're saying because of the disclosure rules those will not be available at the state level. Is that correct?

Andy Hait:

No, so in the ABS we are still publishing data by geography even down to the place level, and we are still publishing it by industry, and we are still publishing it by race, ethnicity, gender and veteran status. But, some of the really detailed cross-tabulations - so let's say you pick a particular - a very small race category.

Let's pick Native Americans and let's pick Hawaiian owned businesses, Pacific Islander and those types of businesses. If you choose to one of those and try to look for that particular race for a specific six-digit NAICS code that's a very small industry code for a very small city, then you're absolutely right. That data would not be published. The new rules would basically trim that.

But, if you're willing to look at more aggregated NAICS breakouts -- so let's say the two-digits NAICS level - retail, manufacturing, healthcare, things like that -- those broad NAICS breakouts by the broad race and ethnicity category - so total Hispanic, total Asian, total Black-owned - those race categories will still be published at the state, county and even place levels. You'll see the place level data mostly for larger cities like Los Angeles and Chicago and things like that. But there are still some place level data available for small or medium-sized cities.

The press release that went out on Tuesday referred to the ABS data and talked just about the national level data that the report shows, but if you click on the link that was in that press release and it will bring you out to our data.census.gov platform, then you can go in and start drilling into the more detailed geographies and the more detailed industries. But, yes the data are there. It's just there are certainly impacts on what we published.

(Caller 2):

Okay, so what was released includes the state level and other geographies?

Andy Hait:

Absolutely, absolutely. What I normally tell people is when you're looking at state and local area geographies, start off at the more aggregated NAICS levels - like NAICS 00 the total or the two-digit NAICS totals - and then see what's published there and then begin to drill down rather than the other way around.

(Caller 2):

Okay.

Coordinator:

Thank you. I'm showing no further questions at this time.

Adam Grundy:

All right. Well we want to thank everyone for attending today. I want to thank my colleague, Andy Hait, for chiming in with the questions and giving some good detailed answers as well. We thank you for your interest in Census Bureau data and we look forward to hearing from you all again. Thanks.

Coordinator:

Thank you, and that concludes today's conference. You may all disconnect at this time. Speakers, please stand by for post-conference.